



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

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OFFICE OF
ENVIRONMENTAL CLEANUP

August 7, 2012

Pamela K. Miller
Executive Director
Alaska Community Action on Toxics
505 W. Northern Lights Blvd, Suite 205
Anchorage, AK 99503

RE: Flint Hills Resources' North Pole Refinery
EPA Site ID# AKD000850701

Dear Ms. Miller:

As you know, on May 21, 2010, the Alaska Community Action on Toxics (ACAT) wrote to the U.S. Environmental Protection Agency (EPA) Region 10 petitioning that a Preliminary Assessment (PA) be conducted at the Flint Hills Resources' North Pole Refinery, located at 1150 H and H Lane, North Pole, Alaska.

Your concerns were potential impacts to North Pole residents' drinking water sources and public health from past activities as well as releases of contaminants to the environment at the refinery, specifically the release of sulfolane.

EPA, through its contractor, Ecology and Environment, Inc., has completed the PA of the Flint Hills Resources' North Pole Refinery Site as requested. A copy of the PA report is enclosed. At this time, EPA is still evaluating the information contained within the report and plans to consult with the Alaska Department of Environmental Conservation (ADEC) to determine the best approach to further investigate and remediate the site, as there has been substantial work completed already. Throughout the PA process EPA engaged in conversations with ADEC to further understand groundwater contamination issues related to the refinery as well as their current actions and future plans to investigate and address sulfolane contamination within North Pole groundwater.

It is our understanding, since the discovery of sulfolane in North Pole drinking water in 2009, ADEC has made significant progress in delineating the extent of the sulfolane plume, minimizing exposure to sulfolane contaminated groundwater, and is working towards determining potential actions for addressing and remediating contamination related to the site. In addition, ADEC has been working to develop appropriate public health action levels. Key milestones include:

- Extensive site investigation beginning in Oct. 2009 and ongoing,
- Bottled water provided immediately until permanent solution found.

- ADEC Interim Cleanup Level lowered to 25 ug/L, in February 2010, based on Health Department's preliminary evaluation.
- A technical project team of experts formed by ADEC in March 2010 to oversee investigation and cleanup, to which EPA has been involved with on various levels,
- Interim cleanup plan approved by ADEC in September 2010 to increase robustness of the process.
- New analytical techniques developed to detect sulfolane in vegetables, water, and soil at lower levels.
- A garden study completed in 2010, which found sulfolane in garden vegetables, particularly leafy greens
- Permanent drinking water options developed in 2010 and implemented in 2011. Residents have also been offered a garden watering tank.
- The National Toxicity Program has accepted ADEC's nomination of sulfolane for further research in December 2011.
- EPA toxicity value (PPRTV) released in January 2012 which allowed ADEC to finalize a site-specific cleanup level for sulfolane at 14 ug/L, pending new toxicity data that may eventually become available from the NTP efforts described above.
- 2012 treatability studies in concert with research at University of Alaska Fairbanks and University of Oklahoma indicate enhanced biological and/or chemical degradation may be effective even at the cold water temperatures. These are being evaluated in the on- and off-site feasibility studies for inclusion in the final cleanup plan, which is expected at the end of 2012.

Until EPA has made a decision on the site, I encourage ACAT to work with ADEC to understand their past actions, current actions and future plans to investigate and address sulfolane contamination within North Pole groundwater.

In the meantime if you have any questions about this PA report, please feel free to give me a call at (206) 553-6396.

Sincerely,



Brandon Perkins
Site Assessment Manager

Enclosure

cc: site file

Ann Farris, Project Manager
Alaska Department of Environmental Conservation